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EXTENSION SERVICE REVIEW



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EXTENSION SERVICE

C. W. WARBURTON, *Director*

REUBEN BRIGHAM, *Assistant Director*

C. B. SMITH, *Assistant Director*

TOMORROW . . .

THE NEW YEAR brings plans for the future and reports of the past. The Unfinished Extension Job as reported by the extension committee studying rural youth programs will be reviewed by Director C. W. Warburton.

THE 1938 MODEL for an extension program as it was developed and launched in Kansas offers many good ideas on planning.

LOOKING BACK at last year's plan, County Agent D. A. Adam, of Young County, Tex., tells how the program worked out. . . . A bird's-eye view of extension work throughout the United States during the past year gives some indication of the magnitude of the movement and the direction it is taking.

SIGNPOSTS pointing to the work ahead can be found in the brief accounts of some of the recent activities of extension agents.

THE COORDINATING of the efforts of several subject-matter specialists is a feature of the Connecticut six-point poultry program.

TOURS as an extension method prove effective in Nebraska, according to the experiences of County Agent Victor M. Rediger. Field days also helped to tell the story of seed corn to Minnesota farmers.

On the Calendar

Grand National Livestock Exposition, San Francisco, Calif., Dec. 5.
 Eighth Annual 4-H Junior Livestock Show, Detroit, Mich., Dec. 8-10.
 Annual Convention, American Farm Bureau Federation, Chicago, Ill., Dec. 13-15.
 Vegetable Growers Association of America, New York, N. Y., Dec. 13-16.
 Eighty-ninth Boston Poultry Show, Boston, Mass., Dec. 29-Jan. 2.
 National Western Stock Show, Denver, Colo., Jan. 15-22.
 Tri-State 4-H Fat Lamb Show and Sale, Sioux Falls, S. Dak., Jan. 25-27.
 Southwest Texas Boys' Fat Stock Show, San Antonio, Tex., Feb. 24-26.
 Houston Fat Stock Show, Houston, Tex., Feb. 26-Mar. 6.

On Behalf of the Tenant

C. C. RANDALL

Assistant Extension Director

University of Arkansas College of Agriculture

THE Arkansas Extension Service has never inquired into the state of a man's purse as he sought an answer to his problems, nor has it been concerned with the ownership of the land which he tilled. Its function has been to give help when and where it was needed. The county agent and home demonstration agent have met with all farm men and all farm women on the common ground of their concern in farm and home affairs. Nearly 50 percent of the thousands who sought the assistance of Arkansas county extension agents in 1936 were tenant families.

FOLLOWING the advice of the Extension Service, many a farm family has been able to rise from the ranks of tenancy to farm ownership, has paid for a farm, and has prospered. Last year, in Arkansas alone, 4,775 families accomplished this. In the future many others will be able to take this step unaided, except for a knowledge of how to use the land gained through their own experience and their close contact, through the county extension office, with the latest developments in agricultural research.

BUT there are others who need further help, and the way is now open for us, as extension agents, to help them to bridge the gap between the uncertainty of farm tenancy and the satisfaction and security of farm ownership. Through the Tenant Purchase Division of the Farm

Security Administration, even though its activities are necessarily limited, we have the opportunity to play a most important part in a mass demonstration of what might be done by a nation for its citizens.

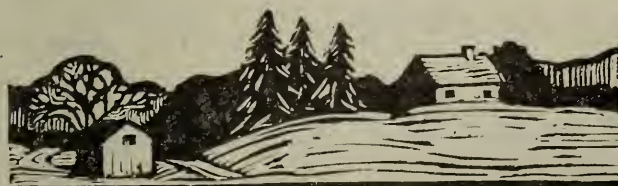
OUR help in this program will be of two kinds: first of all, in selecting families which are capable, and then to pass on to them the best information that we have concerning farm and home management.

WHILE giving this help, we shall not forget the others who are not quite ready for the step up the agricultural ladder. There will be many who can better their condition, as did 21,225 Arkansas farmers last year, through improved lease and rental agreements.

THE influence of the Extension Service will be seen in thousands of other homes. When more than half of the home demonstration club membership, 24,000 of the 49,000 4-H boys and girls, and nearly 50 percent of the junior-adult 4-H clubs come from tenant or sharecropper families, as is the case in my State, we have all the proof we need that nonowner families are as interested as their landlords in sound, improved farm and home practices.

WE also have proof that the work will show results among this large group. The demonstrations carried on by our tenant 4-H club

(Continued on page 189)



Learning How to Use Electric Current

GEORGE D. MUNGER

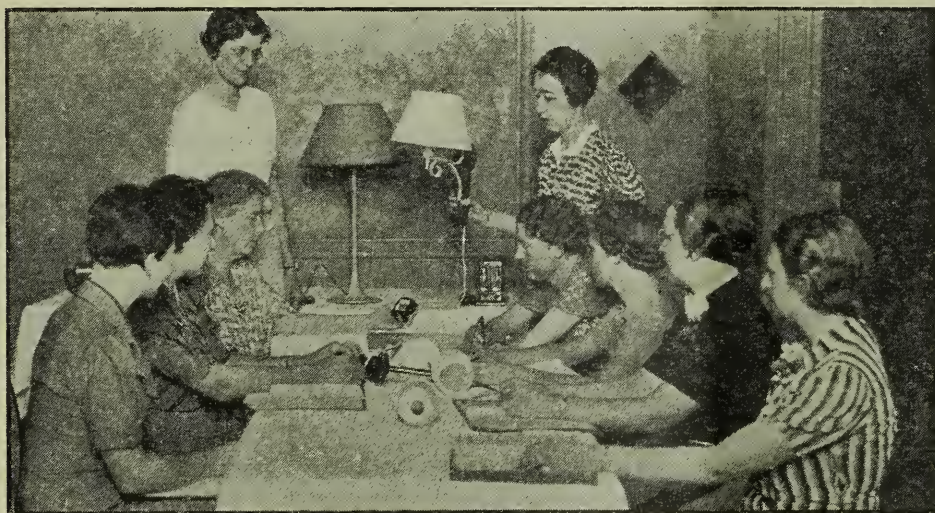
Director of Utilization, Rural Electrification Administration

RURAL electrification is a single name for two tasks. The first, which comes immediately to everyone's mind, is the task of getting the actual power line built from the source of power to the farmer-consumer of power. Within certain limits it is a technical job. The rules have been set up, and the lines are built accordingly.

The second task is more difficult. The rules have not been so decidedly determined. Instead of being technical, the second task concerns people and families.

themselves or agricultural authorities about the benefits of electricity on the farm. In addition to the many uses it has around the farm home, such as electric lights, running water laundry and cleaning equipment, and the electric range, electricity has scores of uses on the farm itself which tend to decrease

stances, county agricultural agents and home demonstration agents have been instrumental in forming cooperatives to take advantage of R. E. A. financing. And everywhere extension agents have enthusiastically and whole-heartedly given their time and energy in developing projects.



Kansas home demonstration agents study problems in the use of electricity. R. E. A. utilization representatives standing in rear, Clara O. Nale, a former home demonstration agent at the left, Mary Taylor, at the right.

It has to do with making living conditions better and life more pleasant and comfortable. This second task is the utilization of electricity on the farm after the power lines have been built. Upon the success of the utilization program depends the success of the whole rural electrification movement.

Need for More Information Felt

With thousands of farmers getting electric power for the first time over lines financed by the Rural Electrification Administration, the magnitude of the utilization problem becomes apparent. There is little question among either farmers

operating costs and increase the farm income.

But successful use of electricity on the farm requires some familiarity with power. Most of the farmers who are receiving current over R. E. A. lines have not had the opportunity to use electricity before. They are not acquainted with its possibilities or with its limitations. Thus the educational aspect of the utilization program is very vital.

Many offices of the Extension Service are cooperating with the R. E. A. in this program. For the past 2 years especially, extension workers have reported an insistent demand from their farmers for information on electricity. In some in-

New Technique Demanded

R. E. A.'s utilization program, projected on a national scale, demands new techniques that no agency has ever before had occasion to use. Slowly we are evolving these techniques. R. E. A., of course, has its own utilization field staff, but the job ahead is large, and the staff must necessarily be small. It is here that the Extension Service is doing very useful work.

For many years extension workers have understood the value of electricity to the farm. In many counties they have almost single-handedly developed new uses for power and have encouraged their installation on the farms in the county. Often because of the interest of the county agent, new sources of revenue from electricity have been made available to the nearby farmers. R. E. A. was pleased to find that the agricultural agents and home demonstration agents have continued to do this work.

It has been our experience that extension workers are eager to learn about electricity so that they can spread the word throughout their areas. From the beginning, a great part of our literature on both development of projects and utilization of power has gone to extension people and has been distributed to the surrounding farm families through extension offices.

For example, a recent significant step was taken at Abilene, Kans., when a training school in the use of electricity in the farm home was held for home dem-

(Continued on page 191)

Oregon Tries Sky Planting

Grass Seeding from Air Proves

Rapid, Cheap, Effective on 12,000 Acres

WILLIAM L. TEUTSCH

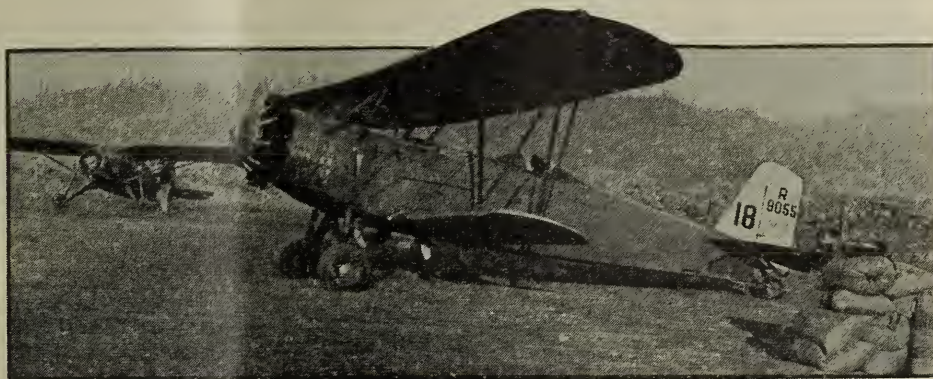
Assistant County Agent Leader, Oregon

UP from the ashy seedbed formed in the fall of 1936 by one of the worst forest fires ever experienced in Coos County, Oreg., has grown 12,000 acres of grass—grass on which thousands of cattle and sheep are growing sleek and fat and which is helping to rehabilitate a county which suffered great economic loss from fire. Thought to be the largest grass seeding ever made by airplane in this country, this 12,000 acres of grass waves in the Pacific breezes as an example of county-agent leadership. George H. Jenkins, county agent of Coos County, recognized the needs of his people, organized them in a cooperative undertaking, and with the support of the Governor of the State, the county court, the State Department of Agriculture, and the Oregon State College, completed a difficult task in record-breaking time.

Quick Action Imperative

In place of fireweed amid the charred snags and logs, representing a total loss to the county and its people, there is grass which is preventing erosion and bringing money into the pockets of ranchers and stockmen. Uniform stands of grass were obtained. Time is the most important element in seeding after a burn. The cooled ashes form the seedbed, and for best results the seed should be on before the heavy winter rains set in. In the area of burned-over farms, neither funds nor man power were available to seed 12,000 acres by hand in the limited time in which it had to be done. Airplane seeding was the practical method.

Many victims of the forest fire, which completely destroyed Bandon, a town of 1,700 population, and burned the entire acreage on many farms, destroying grass, hay, fences, and in some places farm buildings, called at the county agent's office and expressed a desire for assistance in seeding the burned-over lands. At Jenkins' invitation, 150 persons attended the meeting at Coquille, October 14, at which a plan of action was developed. At this meeting were William A. Schoenfeld, dean of agriculture, Oregon State



Pilot Hazelwood loaded ready to take off with 1,200 pounds of grass seed.

College, representing Gov. Charles H. Martin; and representatives of the Resettlement Administration and of the Coos County Court. All pledged cooperation and assistance. One of the decisions was that as much of the area as possible should be airplane-seeded to grass. A committee of six growers, headed by J. E. Ford of Marshfield, was elected to work with Jenkins in perfecting plans and carrying on seeding operations. Other members were R. H. Christensen, J. F. Van Leuven, Robert Geaney, Robert P. Carman, and Frank Fish.

An effort was made by Governor Martin to obtain Army planes to do the seeding. Although Army regulations prevented this, Governor Martin requested Solon T. White, his director of agriculture, to give the Coos County people every assistance possible in obtaining a plane. It was through the efforts of Mr. White that the committee was able to find and purchase at an advantageous figure an airplane particularly well adapted to the job. F. E. Price of the agricultural engineering department of the college personally supervised the installation of two grass-seed hoppers with a capacity of 1,200 pounds.

Seed 15 Acres a Minute

By October 27, just 13 days after the Coquille meeting, an airplane had been purchased, an experienced pilot employed, seed hoppers installed, and 80,000 pounds of grass seed ordered with the first shipment on hand. Carrying 1,200 pounds

of seed at a load, W. A. Hazelwood, pilot, turned the plane out over the blackened landscape, dropping seed at the rate of 15 acres a minute and seeding 150 acres each trip.

The project was successful. There are 12,000 acres with an excellent stand of grass; the plane has been sold, all bills paid, and the costs calculated. The project was completed without relief funds or gifts. Through cooperation and assistance of established agencies these Coos County stockmen met their problem. The cost of airplane seeding as finally determined was 20.8 cents per acre. This included all costs—gasoline and oil, the cost of the plane (representing the difference between purchase and sale price), the pilot's wages, and mechanical repairs. It easily represents a saving of between \$6,000 and \$8,000 in seeding costs alone. The lowest price offered by any commercial aviation concern was 75 cents per acre, and the cost of hand seeding ranges from 60 cents to \$1.50 per acre.

In a year when seed supplies were scarce, there was an additional advantage in pooling orders for seed. Not only were good varieties of grasses used, long-lived perennials chiefly, but the pooling of an 80,000-pound order of seed also enabled a substantial saving. In this case, prompt action paid dividends, as prices of seed continued to advance throughout the fall and winter months.

Approximately 8 pounds of seed was used per acre, consisting of the following mixture: Common ryegrass, 3 pounds;

English ryegrass, 2.5 pounds; orchard grass, 1.4 pounds; Highland bentgrass, 0.35 pound; and white clover 0.6 pound. In a few cases, Chewing's fescue was added to the mixture. Seeded at the rate of 8 pounds per acre, this mixture cost growers approximately \$1.05 per acre.

Inspection of the planting in late July shows that the ryegrasses have developed to hay height. This is particularly true of common ryegrass. Orchard grass, Highland bent grass, and Chewing's fescue, which start more slowly after seeding, were established, giving every evidence of providing abundant feed for 1938, thus taking up the slack as shorter-lived common ryegrass passes out of the picture. Never before in Oregon history has such a uniformly high-quality seed,

Traveling at the rate of 90 miles an hour or better, and flying at an elevation of approximately 500 feet above the ridges when over the tract to be seeded, the pilot would open the gate valve in one of the hoppers and permit the seed to spill out. It was caught in the propeller wash and spread uniformly in fan shape behind the ship, reaching the ground in a strip about 150 feet wide. The rate at which the seed flowed out of the hoppers was estimated on the ground, and then a known acreage was seeded and adjustments made in order to set the hopper opening to feed at the rate of 8 pounds per acre.

What do ranchers think of the result? R. H. Christensen, on whose farm 500 acres were seeded, says: "Airplane seeding is a good way to seed logged-off land

be seeded and, for a time, between logging and reforestation, can be successfully grazed, thus reducing the fire hazard and turning to economic use lands which otherwise are an expense to the county.

"I consider the completion of this project one of the important developments during my 7 years as county agent in Coos County," states George H. Jenkins. "It was quite a task to keep the records, purchase the seed, make collections, schedule the plane, arrange for ground crews to mark the tracts to be seeded, and attend to the numerous details. There were times when it was doubtful if we could meet the payments on the plane which had been purchased, and there were other difficulties with which such an enterprise is fraught. The objective, however, justified the means."



An excellent stand of grass seeded by airplane among charred logs and stumps.

predominantly of perennial species, been used in seeding cut-over land. Usually, cheap burn mixtures, consisting of weeds and short-lived grasses, a byproduct of cleaning plants, are used. It is believed that because the more desirable grasses were used that the grazing capacity will be increased and maintained at a high level of production over a longer period of time.

Seeding by airplane is easy to write about, but it is not so easy to do, particularly in the Oregon coast country. Fog, rain, and wind presented difficulties; the country is rough, and landing fields are few. On many days it was not possible to fly at all because of fog, wind, or rain. Even on the best of days, a maximum of only about 4 hours' flying was possible. But, in spite of these adverse conditions, growers were practically unanimous in the opinion that the airplane is the most economical and practical method of seeding such lands.

which has been burned over. There is an excellent stand on my land with grass waist high, capable of carrying a cow to the acre this season. I should not have seeded at all had it been necessary to do it by hand."

R. L. Clark, president of the Coos County Sheep Co., a concern which runs 1,400 ewes, expressed a similar view. "Look at that grass," Mr. Clark said. "Chewing's fescue, Highland bent, English rye everywhere, and on the unseeded tracts nothing but fireweed 3 to 5 feet tall. The airplane method is the only way to seed this land."

Not only was the airplane seeding successful, but it stimulated interest in hand seeding of these burned-over lands. Approximately as many acres were seeded by hand as by plane, bringing the total seeding to more than 25,000 acres. Looking to the future, the county planning committee estimates that there are 200,000 acres of similar lands which can

Surveys Indicate Value of Regular Broadcasting

Surveys conducted in Dubuque and Winneshiek Counties, Iowa, to determine listener interest in county-agent broadcasts and syndicated Farm Flash programs furnished by the Federal Extension Service and read by the station announcer, indicate that the broadcasts are reaching farm people with timely news and information.

In Winneshiek County, members of the rural young people's organization interviewed neighbors in a community service project, obtaining the answers to the questionnaire. In Dubuque County, Frank R. Kerrigan, county agent, mailed the questionnaire to all farmers in the county.

Almost all who heard the programs reported getting worth-while information from them. One-fourth of those who heard the agent's broadcast reported that they had written or called at the county extension office for bulletins or other material offered by the agent in talks.

The most popular subject matter consisted of practical hints on farming and homemaking, such as livestock feeding, crop production, insect control, disease prevention, removal of stains, and seasonal recipes. Second in popularity was economic information and explanation of the A. A. A. and similar Federal programs.

Nineteen of Iowa's county agents are broadcasting regularly over six commercial stations which use Farm Flashes on days when the agents do not broadcast.



Extension workers from four States attended the 3-week graduate course in extension organization programs and projects given at the University of Louisiana. During the summer of 1937, 554 extension workers from 28 States attended such courses.

Agents Train For Greater Usefulness

C. W. WARBURTON

Director of Extension Work

PROFESSIONAL training for extension workers took a long stride forward during the summer of 1937, when some 554 State and county workers devoted from 3 to 8 weeks to systematic study in order to increase their effectiveness as extension teachers. Special courses for extension workers interested in professional improvement were offered at nine State agricultural colleges and universities and at Tuskegee Institute.

In Colorado, Indiana, Louisiana, Tennessee, and Wisconsin, the courses were of 3 weeks' duration. At Maryland, North Carolina, Vermont, and Tuskegee, the courses were continued for 6 weeks. Missouri offered an 8-week course. At 8 of the 10 institutions the classes were attended by both men and women extension workers.

The extension course at Fort Collins, Colo., was unique in set-up as well as in origin. This cooperative enterprise between the States of Kansas, Nebraska, and Colorado took root at the annual conference at Manhattan, Kans., in October 1936, when a committee of extension workers considering opportunities for professional improvement recom-

mended that a summer course for extension workers be set up at Fort Collins, Colo., in preference to Manhattan, Kans. I was asked to pass the suggestion along to the Nebraska extension workers when I attended their conference at Lincoln the same week.

The interest of Kansas and Nebraska was reported to President Lory, of the Colorado State Agricultural College. Representatives of the college teaching and extension faculties of the States of Colorado, Kansas, and Nebraska met with representatives of the Federal Extension Service at Houston, Tex., in November to consider the idea further.

A 3-week summer session for extension workers was approved by the trustees of the Colorado State Agricultural College, and arrangements were made to offer three courses, namely, methods and philosophy of extension, agricultural journalism, and land-use planning, with instructors of national repute in charge of each.

The enrollment from 13 States of 104 in-service extension workers and 16 land-use planning and soil-conservation employees (including 85 men and women from Colorado, Kansas, and Nebraska) is ample evidence of the success of the cooperative undertaking.

Statistics for 1937 Summer Sessions

Institution	Length of session	Attendance by—		Number of States represented
		Extension workers	Others	
	<i>Weeks</i>			
Colorado State Agricultural College.....	3	104	16	13
Indiana, Purdue University.....	3	31	—	1
Louisiana State University.....	3	97	7	4
Maryland University.....	6	20	1	5
Missouri University.....	8	18	—	1
North Carolina State College.....	6	28	—	1
North Carolina College for Women.....	6	16	—	1
Tennessee University.....	3	106	21	13
Vermont University.....	6	9	—	1
Wisconsin University.....	3	9	4	1
Tuskegee Institute.....	6	116	—	10
Total.....		554	49	28

While the size of the extension staff in many of the larger States is sufficient to justify the setting up of special courses for their own extension workers, it is believed that much will be gained by a group of States cooperating in the support of a training center similar to that held in Colorado. Large attendances will justify a substantial program of courses extending over a period of years, will finance well-qualified instructors, and will create enthusiasm. Most important of all is the opportunity for extension workers from a number of States to compare experiences while engaged in a serious study of the ways and means of raising their standards of extension teaching.

Judging from requests already received for members of the Federal Extension staff to assist with 1938 summer courses, it is probable that more institutions will offer special extension courses next year, and the attendance will no doubt surpass that of 1937.

For the Small Texas Dairy

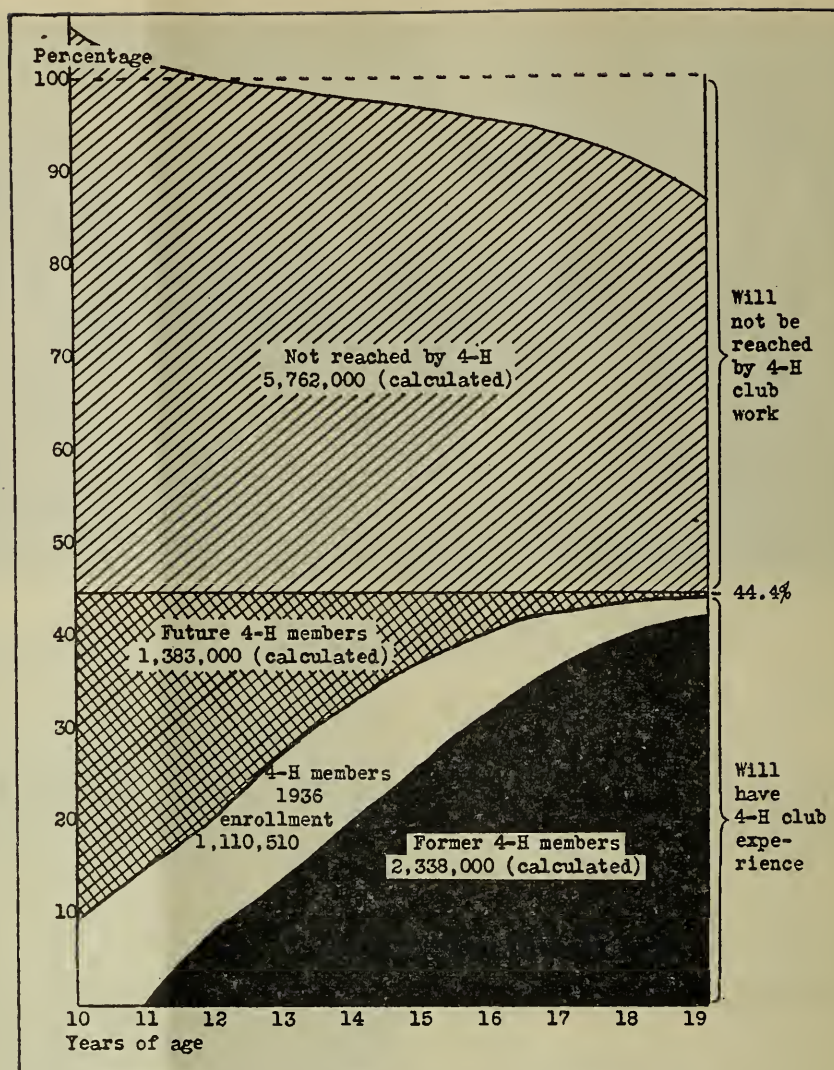
"The difficulty encountered by small dairymen, and by the owners of small farm herds of two or three cows, in obtaining the use of a good bull to build up their herds is one of the outstanding problems of Texas dairy improvement work," reports G. G. Gibson, assistant extension dairyman.

The 30 members of the Wharton County Jersey Cattle Club recently offered a possible solution to the problem when they purchased a 3-year-old bull, B X Foremost, a sire of distinguished ancestry. The bull is kept in a safety bull pen near Wharton, the county seat, and is available to all dairymen in that section.

A trailer is available for anyone to use in bringing cows to the bull. The scale of service fees is: For members, \$1 for registered cows and \$2.50 for grade cows; for 4-H club members, \$1; and for non-members, \$10.

The safety bull pen and breeding chute used were built according to the specifications furnished by extension dairymen. A competent veterinarian has volunteered his services in seeing that the bull is kept healthy.

"Through a minimum of expense," Mr. Gibson states, "small dairymen and 4-H club members who own one or two cows have the same opportunity to build up their herds as have commercial dairymen."



4-H Membership

THIS graph shows that 4-H club work is reaching 44.4 percent of the rural boys and girls in the United States. It is based upon the relation of the 1936 4-H enrollment to the total number of rural young people—both farm and rural nonfarm—reported in the 1930 census. Forty-four percent is the portion of the young people who will have 4-H experience sometime between 10 and 19 years of age. This includes former, present, and future 4-H members and is calculated at the 1936 rate of enrollment.

One hundred percent represents the 1,209,000 rural boys and girls who annually pass the average 4-H starting age of 12.2 years. The 536,895 new members enrolled in 4-H clubs in 1936 are equal to 44.4 percent of those who reached the average starting age during the year.

Of the 10,593,000 rural boys and girls 10 to 18 years of age, inclusive, throughout the country, 1,110,510 are now 4-H

club members. If 4-H club work continues to enroll new members in the same numbers as in 1936, there are 1,383,000 rural boys and girls 10 to 18 years of age who will join before reaching their nineteenth birthday. Likewise, if in the past 4-H club work had enrolled new members at the same rate as in 1936, there would be 2,338,000 former members who have not yet reached their nineteenth birthday. The remaining group of 5,762,000 rural boys and girls will pass through the period between the ages of 10 and 19 years without joining a 4-H club.

On the basis of 1936 enrollment and other available data, it is estimated that 4-H club work is reaching 67 percent of the farm girls, 50 percent of the farm boys, 30 percent of the rural nonfarm girls, and 15 percent of the rural nonfarm boys.

Farm Woodland Demonstrations

Interest Wisconsin Farmers

HARVEY L. BECKER

County Agent, Oneida County, Wis.

PERMANENT methods of woodland improvement have been demonstrated to large groups of farmers of Oneida County, Wis., through the cooperation between the Agricultural Extension Service, the Civilian Conservation Corps, the Wisconsin Conservation Department, and the Federal Forest Service through key farm-woodland owners in each community.

The Director of the Civilian Conservation Corps has authorized the use of C. C. C. boys to do stand improvement work on private woodlands when certain conditions are fulfilled. First, the owner agrees to set aside for a period of 5 years a 5-acre tract to serve as a model woodlot in his community. Second, the demonstration must be educational in nature. Because the agreements are so reasonable, many more woodland owners than we could take care of requested that their own tracts serve as community models. The fact that the demonstrations had to be educational in character limited the number of such demonstrations to one in a community.

With the aid of F. B. Trenk, State extension forester, series of demonstrations were planned for the different communities in Oneida County. Each tract selected represented a type of improvement needed by the woodlands in the community.

The educational meetings which preceded the C. C. C. work were conducted in the nature of a woodland improvement judging contest. The value of stand improvement was discussed and the principles demonstrated. In other words, the rules of the contests were set up. Mr. Trenk and, in several instances, our area forester, a representative of the State Conservation Department, conducted this educational feature.

For the contest, trees were tagged with white cards numbering 1 to 40, and each farmer present was given a score card with

the corresponding numbers placed on the left-hand side. Opposite these numbers were two columns headed "take" and "leave." On the basis of the previous discussion and demonstration, each proceeded to make a study of the tagged trees and those in the immediate neighborhood and then, by means of a check mark, to indicate which of the trees in his judgment should be removed and which should be left for future development. With the completion of the judging, a discussion led by the specialist in forestry and participated in by the contestants resulted in decisions for the correct disposal of each of the trees. Each farmer corrected his own score card, because we felt that the real educational value of the meeting was in having each farmer know where, in his judgment, he was either right or wrong.

To add interest to the meeting, local merchants, and in one case the owner of the woodland, donated a double-bitted ax to the farmer having the highest score. Competition for the honor was keen. In some places farmers attended several meetings with the hope that their batting average would improve and make them eligible for the prize.

Following the contest, the State extension forester, with the help of the area forester and the superintendent of the nearest C. C. C. camp, blazed the remaining trees on the 5-acre tract which were to be removed. Soon afterward, the C. C. C. boys came in and actually removed the blazed trees and disposed of the slash, either by burning or by

cutting it to a size that would readily decay.

Follow-up meetings are being planned within the next year or two so that farmers in the community can see the worthwhileness of the operation. At that time we plan to give an account of the cost of the operations and the amount and kind of wood products removed.

To date, five model tracts have been established. Each has been designed to represent the type of work needed in the community. Increasing the quality and productivity of the sugar bush through the removal of diseased and inferior specie was the object of two of the demonstrations. Increasing the productivity of mixed hardwoods was the object of demonstrations held in two other areas. A fifth demonstration in conifers showed how pulp and timber production could be increased through thinning of Jack pine and the releasing of a more valuable growth of Norway and white pine.

Each of the cooperators has, as a result of these operations, obtained a year's supply of fuel wood, sawlogs to meet his current farm needs, or a profitable cutting of pulpwood, and, in addition, has left his woodlands in a more productive condition than before. While Oneida County, to the average tourist, has seemingly an inexhaustible supply of fuel wood and a growing future timber supply, yet farmers themselves at these meetings have indicated a growing scarcity on their own farms. They recognize that improvement cuttings to provide their own fuel and lumber supplies is the only means by which

they can avoid idle acres on some of their lands and help to make each of these acres bear some of the overhead costs of farming. Many woodland owners are already planning, as a result of these demonstrations, to make the woodlands permanently profitable.



Landlords and Tenants Together

O. B. ELLIOTT

County Agent, Walthall County, Miss.

Knowing that more than 50 percent of the farmers of Walthall County, Miss., are tenants, I have long realized that no effective agricultural program could be carried out in the county unless the tenant farmers, as well as the landlords, have a clear understanding of these programs. The 4 years of the Agricultural Adjustment Program have helped in getting acquainted with the tenants and have afforded an opportunity to work individually with them.

Seeing the need of encouraging tenants to remain on the same farm in order to be benefited by helping to conserve and build the soil and having attractive and well-cared-for homes, every tenant was invited to all meetings relative to any phase of agriculture in the county to acquaint himself with his landlord's problem as well as with his own.

Two years ago a one-variety cotton program was launched in this county. Knowing that tenants would want to continue to plant the variety of cotton which would perhaps produce the highest yield per acre regardless of grade and staple, an effort was made to have all tenants present at our community meetings in order that each one might thoroughly understand, as well as the landlord, the advantages of a one-variety cotton program in his community. The accomplishment of this one program in 2 years has been an increase of the selected variety from 25 percent of cotton acreage of the county in 1934 to 90 percent in 1936. I do not believe that this work could have been accomplished so quickly if only the landlords had been contacted.

4-H club boys coming from tenant families have been especially encouraged, and agreeable arrangements have been made with landlords for the boys to carry on their club work. Many landlords, after seeing the value of 4-H club work, finance their tenants' boys in their crop and livestock projects.

It has been a practice of some tenants in the fall of the year to sell their share of the corn and hay, as they had no work stock to feed. Little effort was required to convince the tenants and landlords that this corn fed to hogs and chickens, and the hay to milk cows, would profit them more than the sale of it on the market. This one phase of work has resulted in a smaller furnishing account and more food for the tenant families.



This Oklahoma farmer (at right) cooperating with the Extension Service during 11 years' tenancy learned to manage the farm at enough profit to buy and equip a 40-acre farm. He is a community A. A. A. committeeman and the former landlord (at left) a county committeeman.

The County Agent Looks at Tenancy

Most agents find themselves up against the problems of tenancy many times in the course of a year. They know about the good and the bad landlords and the good and bad tenants, and also about the systems of tenancy which hamper good landlords and tenants. Several agents here set down some of their experiences and conclusions on this important subject.

Developing a Satisfactory Farm Lease

WALTER U. RUSK

County Agent, Blackford County, Ind.

When Jim Ward came to my office during the depression days of 1932 to request assistance in getting a Federal emergency loan, he was immediately faced with the requirements of a financial statement. Jim Ward had been a tenant on Bill Collins' 160-acre farm for 7 years and had made a good living for his family of six. He had often borrowed money from the local banker for small amounts ranging up to \$300 to help to pay his taxes and to pay for some harvest help.

Jim was a hard worker, and as long as he made his payments to Landlord Collins twice a year and paid his bank loan, everything was agreeable. Tenant Ward and Landlord Collins had no written

lease, and neither kept any records except on the stub of his check book. Jim Ward planted 60 to 70 acres of corn each year and 30 to 40 acres of oats. When the price of clover seed was high, Landlord Collins refused to buy seed, so they just planted corn again. Corn yields were not so high as the first year that Jim Ward moved onto this 160-acre farm; in fact, in 1932 his corn crop made only 35 bushels per acre, and with corn prices declining to 17 cents a bushel, Jim Ward could not make his cash rent payment.

To make a financial statement was something new to Tenant Ward, and he was inclined to think the county agent was trying to pry into his business. But he was so in need of money for working capital and to pay his landlord that, to obtain a "barnyard loan," he was willing to make a list of his assets and obligations and to list the crops that were to be planted that summer.



The mayor of Greensboro, N. C., inspects the ample food supply canned from a relief garden with the help of the home demonstration agent.

The list showed that 70 acres of corn and 50 acres of oats were to be planted, which left 20 acres for pasture and 20 acres for woods, land for buildings, and waste land. But what assurance did Ward have that 70 acres of corn and 50 acres of oats, with a price of 17 to 25 cents a bushel, would repay the loan and make his fall rent payment? This was where the rub came. When asked if he ever raised tomatoes, Ward replied that he "didn't have time to monkey with such a crop."

I told him that the quality of tomatoes grown in Blackford County was excellent and that the farmers who were careful to plow under plenty of organic matter and who used proper fertilizers were able to grow red ripe tomatoes and to get a good price for the No. 1 picking. So Tenant Ward agreed to plant 7 acres of tomatoes, which he contracted with a local canner. With a good growing season and careful cultivation, Jim Ward had a bumper tomato crop, and, with his two grown boys and the help of two neighbor boys, was able to pick a crop of 72 tons from the 7 acres, which brought him \$9 per ton, or a total of \$648 for the crop. After paying for plants, fertilizer, and picking, Jim Ward had \$450 with which to pay off his "barnyard loan."

In the meantime, repayment plans were being worked out with other farmers and tenants who were arranging for emergency loans. In most cases tomatoes were recommended as a cash crop to repay the loan.

As crop loans and production credit loans became available each year, those taking applications got into the habit of

referring all applicants to the county agent's office where they would work out a repayment plan. This again gave an opportunity to discuss with Tenant Ward his farming program and plans for a definite crop rotation. Landlord Collins was invited in, and we discussed a farm program that would make them more money. They were interested in learning how Neighbor Kennedy, a tenant on a 200-acre farm owned by Albert Myers, a businessman, had a livestock partnership lease that was proving profitable to both parties over a period of years. They were maintaining high crop yields and selling all their grain crops through hogs and cattle.

The discussion prompted Tenant Ward and Landlord Collins to work out a 50-50 livestock partnership lease. This type of lease is proving to be one of the most profitable kinds of leases used in Blackford County and provides that each party shall furnish: (1) One-half of all livestock, except poultry, (2) one-half of all seed and fertilizer, (3) one-half of all livestock expenses, (4) one-half of all machine expenses for threshing, hulling clover, and silo filling, and (5) one-half of all fuel for tractors. Each shall receive one-half of increases and receipts from sale of all crops and livestock. The landlord furnishes the limestone, and the tenant spreads it on the fields.

This kind of lease is proving profitable to Tenant Ward and Landlord Collins. Mr. Ward says: "I am glad the depression hit me. It has made me get out of the rut, and, with the cooperation of the county agent's office, I have begun to put some planning and management into

my farm business. I am glad to make out a financial statement and to do business with my banker again."

It has been through the cooperation of the extension office in assisting farmers to work out repayment plans for emergency and, more recently, production loans that an opportunity presented itself to help dozens of Blackford County farmers to develop: (1) A 50-50 livestock partnership lease, (2) a plan for definite crop rotation, (3) maintenance of soil fertility, (4) the keeping of farm records, and (5) an increased farm income.

In Defense of Tenancy

J. W. CAMERON

County Agent, Anson County, N. C.

More than 50 percent of the population of Anson County are Negroes, which of course makes our tenant population rather high.

We have always assisted these tenants in planning their work and in marketing their surplus produce and have tried in every way to raise their standard of living.

My experience has been, and it has been proved time and again, that the majority of tenants are much better off, live better, and have more to eat and to wear when they live with good landlords than when they move off and try to buy land of their own, because a good landlord can direct and supervise their work and help them to produce better crops. Furthermore, the landlord looks after the health of his tenants by providing doctors and medicine, and in case of funerals, it is always the landlord's responsibility to stand for these charges.

A great many of our tenants are not capable of looking out for a farm of their own; and our experience has been that the majority of them lose the land, their work stock and everything else sooner or later when they launch out for themselves. When they stick to a good landlord who has good land, they have a great deal more income.

We always help the tenants, and especially the Negroes, with farm plans, gardens, fairs, community plans and meetings, and exhibits of various kinds, by attending these occasions, judging the products, giving out information personally, and also distributing bulletins. The Negroes feel perfectly free to come to the office for help and advice, and every day there are some coming in. A great many of them appreciate this help and say so on all occasions.

There is a friendly, helpful spirit in Anson County toward the tenant class, and we feel that the large majority of landlords are sympathetic toward them.

We have quite a number of tenants who have bought land of their own after living with good landlords, saving their income, learning to operate a farm, and gaining the respect of the business people. This has always been encouraged where tenants are capable of managing farms of their own.

Lambs Lure Lads

Lamb-feeding activities of 4-H clubs in the western corn belt of South Dakota have become outstanding livestock projects and are attracting attention beyond State boundaries. The April 1936 issue of the Extension Service Review tells the story of the beginning of this movement in 1934 when extension and experiment station forces organized six 4-H boys in Butte and Lawrence Counties. The boys had 15 lambs each which they ear-tagged, weighed, and fed for 106 days. These lambs were shown in the newly created 4-H section of Lamb-Feeders' Day at the experiment station in 1935. The records kept by the club members showed that a profit was made on the enterprise. In 1935, 105 South Dakota boys and girls followed the project. This year at the Tri-State 4-H Lamb Show at Sioux Falls, 130 lots of sheep were entered by members from South Dakota, Iowa, and Nebraska.

According to H. M. Jones, State club leader, livestock interests consider this expanding enterprise one of the most practical 4-H projects ever undertaken; the work fits into the present farm program and is of sufficient size to attract older boys. As the project goes into the fourth year, there are prospects of five nearby States participating, and the third annual show is already scheduled for January 1938.

Check the Baby

AN INTERESTING innovation at the Cortland County (N. Y.) 1936 fair was the establishment of a free nursery for young children. The home bureau converted a theater with poor acoustics into this nursery where the children could be left in safety by the mothers while they visited the fair. Mrs. Edith Glanville, home demonstration agent-at-large, was in charge, and a nurse from the county health department was in attendance at all times. About 100 babies and preschool children were cared for during the week.

Opportunities for Young People

Theme for Ohio Conference

ROBERT C. CLARK

Assistant in Rural Sociology
Extension, Ohio

THE theme discussed at the first Ohio conference of rural young people by 230 young men and women from all parts of the Buckeye State was "Opportunities in Rural Life." This initial conference, held on the Ohio State University campus, was made possible by agencies actively interested in the welfare of Ohio's agriculture and of the farm families. It was an outgrowth of local and county programs of study and recreation for rural young people during the past few years.

If we ask "Was this conference worth while?" no better answer can be given than the recommendations made by those who attended: "In behalf of the delegates to this conference we desire to express, in this brief way, our sincere appreciation for this splendid conference, made possible through the generosity of the Ohio State University, Ohio State Grange, Ohio Farm Bureau, Agricul-

tural Extension, county school superintendents, Christian Youth Council of Ohio, rural churches, vocational education in agriculture and home economics, and all other agencies which took part in any way.

"First, because of the great inspirational, educational, and social values of such a program as this, we heartily recommend that a similar conference be held next year.

"Second, we recommend a joint meeting of delegates and sponsors of each county to discuss this conference and make plans for future action."

The program of this 4-day meeting, planned in cooperation with the State heads of each of the sponsoring agencies, was directed by Prof. H. W. Nisonger, assistant director of the bureau of special adult education at the Ohio State University. Its aim was to assist each of the delegates, who were unmarried and between 18 and 25 years of age, to think through their individual problems and to offer suggestions enabling them to be more helpful to their respective groups and to the young men and women who accept them as leaders back home.

Five Moore Poultry Specialists



We are not starting a campaign for more poultry specialists, but here are the five "Moore" who are all serving in that capacity in widely scattered States. They are not related; in fact, H. L. Shrader, U. S. D. A. poultry specialist, had to introduce Moore to Moore. The picture was taken at Chicago, Ill., at a conference on the National Poultry Improvement Plan. Reading from left to right: F. E. Moore, North Dakota; J. M. Moore, Michigan; Pren Moore, Idaho; H. L. Moore, Virginia; S. A. Moore, Arkansas.

Five-Year 4-H Club

WHEN the 5-Year 4-H Club of Tippecanoe County, Ind., was organized back in 1931 by County Agricultural Agent S. B. Pershing and County Club Agent J. C. Ralston, no one, not even the sponsors, had any idea that it would develop into such a useful and effective piece of extension machinery as it has.

The 5-Year 4-H Club is exactly what its name says. It is an organization of all 4-H club members that have been enrolled for a period of 5 years or longer. This Tippecanoe County, Ind., club functions upon a basis of "Once a member always a member."

When the club started in 1931, it had a membership of 65—39 boys and 26 girls. This year, 1937, there are 535 Tippecanoe County young men and young women who have completed some time during their lives 5 years or more of 4-H club work.

There is no question but that the 5-year club is a distinct aid in reacquainting the older club members and ex-club members. Parties, dances, and an annual banquet and achievement program constitute the major part of the organization's social calendar. On the achievement program, recognition is given only to State and national club honors won by Tippecanoe County 4-H members. Also, among other things, recognition is given to 5-year members who have won distinction for themselves while away

attending colleges and universities during the past year.

The 5-year 4-H club has many fine activities in which it participates, among which is helping with the club enrollment during the spring months. These older club members give talks before the school groups, telling of their experiences as successful club members and of some of the values to be derived from club work. Another activity of the 5-year club is maintaining a refreshment stand at the county club exhibit, the profits from which are used to help defray the exhibit expenses. Too, the 5-year club members assist in organizing and performing the large amount of work connected with holding a county club exhibit. Probably one of the greatest contributions of the organization is that it encourages boys and girls and young men and young women to participate in club work over a longer period of years than they would if such a club did not exist. In 1936 nearly one and one-half times as many young people, 16 years old or older, participated in club work as in 1931 when the club started.

The officers of the 5-year club are elected by and from the board of directors, composed of 15 members, one from each township in the county and two selected at large. The directors are selected by a nominating committee approved by the membership as a part of the annual achievement program.

tion, and another by club dues. The circulation includes the families of all the club members and influential people in the communities.

Each month R. O. Bale, county club agent of Kent and Washington Counties, writes to his club members under the signatures of Peggy and Bobby Clover, fictitious characters representing the typical 4-H girl and boy. Peggy has volunteered to tell her own story of these letters:

DEAR FRIENDS: Let me introduce myself as a typical 4-H club girl from southern Rhode Island. Each month I write to all the 4-H club girls in southern Rhode Island, telling them of the many things which I have been doing in club work. Many of them answer my letters, telling me of the things which they have been doing; thus we pass our ideas on from one to another.

I have told them how I have redecorated my room, how I plan parties, how I keep from getting sunburned, and many other things. Of course, we girls are all interested in cooking, and clothing, too, so I tell many of the new things I have learned about cooking and sewing.

The 4-H girls in southern Rhode Island seem to like my letters so well that our club agent has asked my brother Bobby to write the same type of letters to the 4-H club boys. Bobby tells what he has learned in his poultry, dairy, and handicraft projects.

We try to include in our letters all kinds of things which other members like, such as photography, hobbies, and nature study. Discussion of our hobbies has made so many other club members take up hobbies that we are having hobby exhibits at camp this year.

We have done many new things in club work this year. One of the most interesting of these has been our 4-H older member week-end camps held in the woods in a real log cabin. We have a chance to discuss our problems with our leaders and to have lots of fun on the trails around our camp and around the fireplace in the cabin.

We have been doing lots of health work, too, some of which is in the form of first aid taught to our clubs by our club agent and by Red Cross nurses.

We feel that we should like to know what club members are doing in other States and to have them know what we are doing in Rhode Island.

"Little Rhody" is the smallest State in the United States, but we are proud of our 4-H club work.

Your 4-H friend,

PEGGY CLOVER.

Rhode Island 4-H Clubs

Have a Nose for News

RHODE ISLAND 4-H club members are bound to know something about publishing a newspaper after having made quite a specialty of club newspapers. In addition, boys and girls in the southern part of the State look forward to the Peggy and Bobby Clover letters from the county club agent's office telling all the latest news.

In Providence and Bristol Counties, five 4-H clubs are now issuing their own newspapers known as *The Reflector*, *The Green Lantern*, *The News*, *The Magpie*, and *The Trail Blazer*, the last two of

which have been published for more than 4 years.

These monthly papers range in size from a single hectographed sheet to a pamphlet of five mimeographed sheets. They include personal news, reports of club meetings as well as county-wide meetings, project suggestions, book reviews, poetry, menus of the month, letters from older people, and original continued stories.

The expense of maintaining these papers is met in various ways, some by local advertisements, one by subscrip-

Create Better Health Habits



The Noxen Club set up a kitchen in the chemistry laboratory to serve hot cocoa and soup.

A TYPICALLY rural county, with small rural schools and a few larger consolidated ones where most of the children attending carry their lunches, is the picture of Wyoming County, Pa., where Edith Gans, home demonstration agent, began to create interest in nutritionally adequate lunches through 4-H clubs last year.

Working in cooperation with Edwin H. Kehrl, county superintendent, a questionnaire and a letter were first sent to each rural school.

Results were surprising. It was found that few children were getting even a pint of milk a day, and 212 school children were getting no milk. Along with this, it was discovered that about one-sixth of the children were carrying inadequate lunches.

Miss Gans, realizing the need of helping to get more adequate meals planned for youngsters, invited parents and teachers to demonstrations where they were shown a nutritionally good, well-packed meal. Then they were told about 4-H clubs and how they might organize lunch-box or hot-lunch clubs to promote interest in keeping up good lunch standards.

Six communities decided to have lunch-box clubs, and the girls in two large consolidated schools decided to organize 4-H clubs which would serve a hot lunch in their schools to those who wished it. Miss Gans gave particular attention to sandwich suggestions for the lunch-box clubs and checked the individual club members' lunches. By the end of the year each member had had 20 of her lunches scored to see how well they met the needs of an adequate lunch. Two

of the clubs reported 100 percent enrollment in the school and 100 percent completion of their work.

The consolidated schools in which a hot lunch was served were Beaumont and Noxen. The Noxen group of 22 members served hot soup or cocoa every day and charged 2 cents a day or 10 cents a week. Ten children in this school who could not afford this charge were fed free by the parent-teacher association which also bought soup dishes and cups for the club. From 25 to 52 students were served every noon. The children fed free were more than 10 percent under weight at the beginning, but at the end of the year, not one of the 296 children enrolled in the school was 10 percent under weight. There were so many girls who wanted to take part that a ruling had to be made that only junior and senior girls were eligible. The project cost \$69, and all but \$27 of this amount was taken in by the club. The tuberculosis association helped to meet the deficit.

In Beaumont 14 girls in the club prepared cocoa at 5 cents a cup every day except Friday when they served a complete lunch for 20 cents. This club last year made \$100 and with it equipped their kitchen. This year they painted the furniture and kitchen, and with the rest of their money bought four dozen folding chairs for the school auditorium. The room given them for the kitchen is very small, and they served the food just outside the door on a candy showcase counter. On Fridays their lunch usually consisted of a main dish and sandwiches. Each sandwich was wrapped separately in a paper napkin. To know how many

lunches to prepare the principal allowed them to take orders ahead of time in the classrooms. Thus they never had any waste.

The work of these 4-H clubs is showing results in the county in healthier school children and in a better understanding of and an increased interest in good nutrition.

A Practical System

In Meade County, Kans., 1,347 agricultural-conservation farm plans were filed during the first 20 days of May, the largest participation the county has had in any government program, reports County Agent Harold Love.

Community committeemen were used in a very practical manner during this campaign, Mr. Love states. The farmer first filed his land changes with one office girl who took care of nothing else but additions to or subtractions from the legal descriptions of the farming units, and filled out form WR-105 from a temporary listing sheet prepared in the county office. Next, the farmer went to one of his community committeemen with his map, which was already drawn before he came to the office. The committeeman went over the map, lettered the fields, gave the acreage, explained the number II payment and the wind-erosion-control practices, and assisted in planning the farm program for the year. The farmer then went to another office girl who totaled the acreage in the fields, changing the acreage on the map until the total acreage on the map corresponded with the total crop acres shown on the listing sheet for this farm.

Next, the farmer presented his map, as corrected, together with form WR-105, to a plotter who shaded in on a map of the township the legal description of the farm, including all pasture and cultivated land. This method eliminated duplications in legal description where two or more operators in some instances were attempting erroneously to file applications on the same land. A number of errors in the giving of legal description also were caught in this way. Finally, the farmer went to any one of a group of four clerks, who, with the assistance of the map as then prepared and with form WR-105, prepared the farm plan WR-106.

On the busiest days, more than 160 farmers were accommodated with this set-up. The smallest day's work was the 75 plans turned out the first day.

Pay Big Idea-Dividends

SWAPPING ideas in agriculture at various farm tours conducted by county extension agents and specialists has proved profitable to farmers of Spokane County, Wash. Big returns in idea-dividends have resulted from the annual legume and livestock tours held each spring for the last 8 years, as originated and directed by County Agent William J. Green.

Last year, more than 130 individuals observed improved farm practices in livestock, legumes, and soil management in a 3-day tour of 22 representative farms in the county. In addition to stops at farms that demonstrated the value of good livestock and legumes, there were stops at a number of erosion-control demonstrations where the seeding of grasses and legumes was shown as well as the building of artificial barriers, such as dams in large gullies.

Some of the farmers visited were doing particularly successful jobs of rebuilding depleted grain land with sweetclover or other legumes. On several of the farms included in the tour, herds of dairy or beef cattle of far above average quality were being built up on a sound breeding and economic basis from a small start of good foundation stock. Other farmers demonstrated their ideas for handling the herd sire without danger, or for putting up the hay under difficulties, or for establishing legumes where the rainfall is limited, and still others showed how they were controlling noxious weeds successfully.

For instance, at one farm the "tourist" saw the results of excellent breeding practices on a small Jersey herd. In the last 12 or 15 years, starting with one purebred Jersey cow, the farmer had developed a very fine high-producing purebred Jersey herd. Official records show an increase from a little more than 400 pounds of butterfat for the early dams to nearly 900 pounds for dams in the present herd. This same farmer had been doing some excellent work with sweetclover as a forage crop and soil builder. He told how in 1933 he had planted unhulled sweetclover seed with winter wheat. In 1934, following the harvesting of a good crop of wheat, he obtained considerable sweetclover pasture. In the summer of 1935, he harvested approximately 2½ tons per acre of

excellent sweetclover hay with a binder. Later in the summer he harvested 3,000 pounds of sweetclover seed from the 20 acres. Last year he had an excellent crop of winter wheat on the same ground. This wheat was demonstrating the benefit of sweetclover as compared with neighboring fields of wheat on which sweetclover had not been grown.

Control of Weeds

At another farm a demonstration of successful weed control was of interest to all on the tour. After 12 years of a losing fight against a bad infestation of Canada thistle, on land too wet for the use of chemicals, the farmer tried clean cultivation at the county agent's suggestion. The land was plowed in the spring of 1935 and cultivated every 4 days thereafter until August, when it was again plowed deep, with many dead roots turned up. Cultivation was continued as needed to keep the top growth down. Last spring the land was cultivated three times. There was no sign of the thistle, and the land has been seeded to alfalfa.

Speaking of alfalfa, farmers who wondered if expensive seed is the secret of getting a good stand of alfalfa had the question answered at another place where the farmer's outline of his farm practice revealed that the real secret is a good, well-packed seedbed and the use of a standard, adapted variety—Cossack in this case. Seed sown April 20 had produced a fine stand 8 inches high on new land when seen on June 25.

County Agent Green took his tour to see what benefits another farmer's land had received from the use of land plaster. This farmer displayed one of the finest crops of alfalfa in the county and attributed his success to the use of land plaster. Here also the touring party observed a simple but effective safety bull pen in which there is located a small feed barn, shelter, running water, breeding pen, and exerciser. The exerciser consists merely of a heavy, seasoned stump of a tree hung by a small chain from a firmly planted pole. The bull pushes the suspended stump around the pole by the hour, with apparent satisfaction to himself and little harm to the stump.

The party observed one of the finest demonstrations on swine management at

another farm. From eight sows the farmer had saved 76 excellent pigs, uniform in size and well developed. When asked how he accomplished these excellent results, the farmer said he practiced strict swine sanitation, thoroughly scrubbing the houses every spring and moving them on to clean, new ground. He also provides alfalfa pasture for the pigs.

In the course of the tour they stopped at another farm and observed the fine work being done by the C. C. C. boys under the supervision of the Soil Conservation Service in building dams in large gullies. Here they also observed the excellent results of inoculation on sweetclover.

On Behalf of the Tenant

(Continued from page 177)

members yielded products estimated in value at \$381,783, while the 12,864 tenant and sharecropper families who took part in the better-homes campaign spent an average of \$19.10 per family in various home improvements.

Too, tenants and sharecroppers have provided leadership in the interest of Arkansas agriculture. Sitting at county council tables, as members of county agricultural committees, 622 tenant farmers contributed their thought and experiences to the problems of county farm planning and practical land use.

For us in the Extension Service, the new plan will be seen as an open door to further opportunity in a field where we have labored for many years. But it will still leave a vast army of tenants and sharecroppers to continue in our usual program of work.

PRESERVATION of farm products by freezing has been a rapidly developing activity in Washington," says Assistant Director M. Elmina White of that State. "Emphasis in the past has been on the storage of meats, but gradually more fruits and vegetables are being preserved in this manner. There are more than 150 centers in the State where locker space is available. Individual lockers have an average capacity of 350 to 400 pounds of meat."

Agents Wake Up

In Michigan District Conferences



C. V. Ballard
Michigan county
agent leader.

NO more snoozes in monthly conferences of Michigan county agricultural agents!

That is not an order or a request, but a fact. For in the last year a new process has been developed for placing the field force of the Extension Service in a better position to play chess with new agricultural problems, practices, and people in Michigan.

"Painless," comments C. V. Ballard, State county agent leader, in describing the new system, much of which is the result of his ingenuity.

In brief, the 71 county agricultural agents serving the 83 counties in the State have been attending a little school. Their district monthly conferences begin in January and are completed in June. True and false questionnaires serve as the foundation. To the questions most frequently found wrong in the answers, department heads of Michigan State College apply latest information, and they even correct their own impressions when conference groups fail to agree.

"Previously our monthly conference meetings served their purpose, but not so well," says Mr. Ballard. "The series each month starts at Kalamazoo, then the next day at Grand Rapids for another section of the State. In succeeding meetings other agents met with us at Ann Arbor, Lapeer, Bay City, Gaylord, and Cadillac.

"We periodically scheduled different department heads to meet with the groups. A few county agents especially interested in some specific phase literally led the department head and the whole conference off on a rabbit track, and the heads of the other agents would nod.

"Two years ago H. C. Rather, head of the farm crops department at the college, devised a set of true and false statements to help the agents check up on their knowledge.

"This past season we extended this process to all the major departments, taking two each month from January to June. Poultry and animal husbandry, crops and horticulture, and soils and farm management were typical subjects linked for the series."

The 1937 conferences became a game, turning a day's hard work into fun. But, to listen to the agents and to the leader and department heads, it proved a real day's work for each meeting.

After scanning 100 statements and marking them up as true or false, the meeting chairman made a survey of mistakes. Then those statements most commonly checked incorrectly were discussed. The agents submitted their scores but took home with them their questionnaires. The meeting for the day also provided them with a bibliography to help them to study those phases on which they needed more information.

Even department heads took the examination, and several found that men back in their own departments at the college had information which the department head did not have accurately in mind.

So the monthly winter conferences in Michigan have become a game, filled with hard work and no snoozes.

Here's the Process

1. Submit sufficient questions for complete coverage of subjects in one department.
2. Check to see how many missed each question.
3. Chairman irons out difficult ones which agents missed.
4. Through references to bulletins and books supplied them, the agents bring themselves up to date.

Printed Circulars Tell the Plan Worked Out by County Committees

Through circulars printed locally in the counties, Minnesota is making effective extension use of material developed by its county agricultural planning committees. In this State the approach on the county-planning program has centered predominantly around a series of crop rotations which, in the judgment of the county committee, would be effective in controlling erosion, maintaining fertility, and

providing an adequate farm income. These county crop rotations were based on suggested rotations developed by the State research committee for each type-of-farming area. Each county revised and selected rotations to develop a series that farmers on the committee felt best suited local conditions.

Twenty-five of Minnesota's 87 counties have thus far received the intensive planning service of the county program planning system. Following these meetings, S. B. Cleland, farm management specialist, suggested to each county agent that the recommendations of the county planning group be published in a crop rotation circular. Sixteen of the agents have been supplied with copies available for printing, and nine circulars have been published.

Each circular is a threefold sheet of handy pocket size. Emphasized in each circular is the series of crop rotations recommended for that particular county. In addition to listing the succession of crops for each rotation, there is a description of its use and the type of soil or other circumstances for which it is adapted. There is a short comment on the method of choosing a crop rotation, why crop rotations are desirable, what practices are to be considered in planning a rotation, and the procedure for setting up one.

To aid livestock producers in planning their feed crops, each circular contains a short table giving the feed production per acre, based on 10-year average yields and expressed in pounds of digestible feed per acre. This table emphasizes that in the areas concerned much more feed is produced on an acre of alfalfa or clover than on an acre of small grain or corn. Thus there is provided an incentive for increasing the acreage of these valuable legume crops.

The names of the members of the county agricultural planning committee appear in the bulletin, and the opening statement emphasizes the fact that the recommendations are made by these farmers.

As stated, the rotation circulars are printed in the county, usually from 1,500 to 2,500 copies being run off at a cost of about \$20. These circulars are playing an important part in the educational program in connection with the agricultural conservation activities, emphasizing the advantage to the livestock farmer of having a large acreage of good legumes for hay and pasture and suggesting a practical means by which such crops can be incorporated into a sound farming program.

Clubs Use Poultry Credit

THE Madison, S. Dak., Chamber of Commerce, in March 1936, through its board of directors, decided to finance 100 boys and girls in 4-H poultry club work. All boys and girls accepted were required to be regularly enrolled as members of 4-H poultry clubs and all agreed to carry out their project according to the instructions and supervision of County Agent C. A. Hicks.

The loan committee actually accepted the applications of 103 boys and girls. Each received 60 White Rock chicks and 50 pounds of starter mash, and in return each one signed a note payable to the chamber of commerce in the amount of \$7.85, due November 1, 1936.

Under the plan used, the chicks and the starter mash were bought at wholesale, and the 10-percent difference between wholesale and retail was set up as an insurance fund against loss. A total of \$135 has been set aside in this insurance

fund and will be used and more added in 1937. At the present time, all but one of the 103 boys and girls getting loans have repaid them in full.

In addition to the 103 boys and girls financed, there were 9 others enrolled in poultry club work. These 112 boys and girls were organized into 11 clubs, and 111 completed their work with every one showing a profit. The total expense was \$1,381.45, and the total value to club members of the poultry raised was \$2,565.50. A net profit of \$1,185.05 or an average of \$10.67 per member, was realized. This was done in the face of depressed poultry prices, and was owing to the fact that more than 90 percent of the 6,000 chicks were raised to maturity. The chamber of commerce was well satisfied with the success of the project and is planning to do the same thing again this coming year.



Learning How to Use Electric Current

(Continued from page 178)

demonstration agents. The meetings, which continued over 4 days, stressed the need for proper wiring and properly selected equipment. Knowledge gained by the demonstration agents from the meetings will be incorporated into individual rural electric programs in the counties in which the agents work.

The first day of the course was devoted to general information about the time and energy that can be saved by the thoughtful use of electrical appliances. On the second day, the electric range and refrigerator were intensively studied. Differences in the various sizes, styles, and makes of appliances were discussed. In addition, the demonstrators learned how to select the proper refrigerator or range for a particular family, and the care and operation of the appliances were explained in detail.

The meeting for the third day centered about the electric roaster, the washing machine, waffle iron, hand iron and ironer, percolator, and electric mixer. Here again the importance of proper wiring and plenty of convenient outlets was stressed by Harold Stoner, rural engineer, of Kansas State College.

On the final day, the importance of proper lighting was discussed. The agents learned how to select good, serviceable fixtures and lamps. The use of shaded bulbs and the proper location of control switches were also discussed.

At the conclusion of the meeting, the class members pronounced it useful and stimulating. Plans were immediately laid to conduct similar courses in other States. Director Warburton wrote to the State directors of extension in Indiana, Ohio, Georgia, Alabama, Missis-

sippi, Wisconsin, Minnesota, Nebraska, and Illinois, outlining a general program whereby R. E. A. and the extension service workers can cooperate to their mutual advantage.

Another example of cooperation between the two agencies concerns Ruth Huckstead, home demonstration agent, located at Richland Center, Wis. The surrounding rural area has been electrified recently through an R. E. A.-financed cooperative. Miss Huckstead reports that home demonstration club meetings at which electricity was discussed have been enthusiastically attended. Among the subjects discussed were how to read meters, cost of operating equipment, how to figure bills, and use of appliances. Miss Huckstead has also written a series of articles for the local newspaper in which she outlined the uses of electricity. These are only two examples, taken at random.

In every section of the country extension people are working hand in hand with the R. E. A. field staff to translate the farmers' new electric service into comfort, convenience, profit, and a new standard of rural living.

New Field Set-up

With the twofold aim of safeguarding the Government investment in loans for new rural electric lines, and of speeding the better living standards which electricity brings to rural areas, the R. E. A. has launched a field program to promote wide and wise use by farmers of their newly available electric power.

Each of the four regional field units is composed of a utilization representative, who works with the project officials in planning load-building activities; and a home electrification specialist, and an agricultural electrification specialist, who, in cooperation with existing agencies, initiate programs to advise the farmer of the proper uses of electricity in the home and on the farm. Headquarters for district I are in Cincinnati, Ohio; district II, Birmingham, Ala.; district III, Minneapolis, Minn.; and district IV, Des Moines, Iowa.

THE sale of products by home-demonstration clubs in Florida approximated \$175,000 during 1937. The club members sold canned fruits and vegetables, fresh vegetables from home gardens, poultry and eggs, dairy products, baked foods, and a variety of miscellaneous articles including craft articles and special products of the home.



Introducing New Soil Test

IN ORDER to popularize a newly developed soil test, the Missouri Agricultural Extension Service cooperated with the Alton Railroad in running a special train this past summer. The train made 1-day stops in 10 counties through the central part of the State, and at these stops 921 soil samples were analyzed.

The equipment on the train was so arranged that the farmer could watch his soil as it was tested for available phosphate, available potash, available calcium, and the degree of acidity of the soil. Under normal conditions a single test was completed in approximately 5 minutes.

Preliminary Work Required

Before the train arrived in a town, the county agent made extensive preparations for its arrival. Through newspaper stories, circular letters, and radio, he told of the train's coming and gave instructions for obtaining representative samples of soil. He also passed out the required application blanks with half of them marked "forenoon" and half "afternoon" in order to avoid the arrival of too many at one period.

The morning and afternoon programs were similar. First, the soil tests were run. Then the groups moved into the lecture car of the train where specialists and county agents described the methods used in analyzing the soils and gave suggestions as to ways soils could be treated in order to make up the deficiencies indicated by the tests. Methods of improving meadows and pastures were also described.

It was not possible to make a complete recommendation for each farmer submitting a sample, but a copy of each analysis was given to the county agent for further recommendations and as future reference in planning his extension program.

Soil Specialists O. T. Coleman and A. W. Klemme, and county agents stated that a greatly increased interest in soils has been noticed following the running of the train.

Genetics Survey Completed

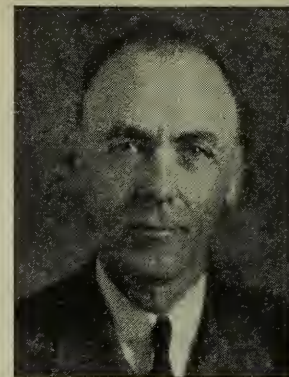
The general survey of all available knowledge on genetics begun last year is continued in the 1937 yearbook of the United States Department of Agriculture. This volume deals principally with the genetics of garden vegetables, northern tree and bush fruits, citrus fruits, flowers, nut trees, forest trees, forage grasses and legumes, Angora and milk goats, turkeys, ducks, fur-bearing animals, honey bees, and finally that good friend of the farmer, his dog. The 1,497 pages round out the work of the committee on genetics appointed by the Secretary of Agriculture in 1933 to make a national and international survey of practical breeding and genetic research with those plants and animals that are important in American farming.

The material was collected through cooperative survey forms or questionnaires designed to survey the breeding and research work in all State agricultural experiment stations and in similar public institutions abroad. The papers composing the book were written by scientists of the Department of Agriculture, who are recognized authorities and actively engaged in genetics work. The material has been written up in as nontechnical form as possible so that it can be used by practical breeders as well as by students of the subject.

A limited supply of these books has been reserved for county extension agents and can be obtained as long as the supply lasts by writing to the Extension Service, United States Department of Agriculture. Additional copies can be bought from the Superintendent of Documents, Government Printing Office, Washington, D. C., at \$2 a copy.

The 1936 and 1937 yearbooks form a valuable reference work on genetics. Plans for future yearbooks call for a survey of the present status of science of soils in 1938 and of animal and human nutrition in 1939. H. G. Knight, chief of the Bureau of Chemistry and Soils, is chairman of the 1938 committee; and O. E. Reed, chief of the Bureau of Dairy Industry, who has served as chairman of the genetics committee, will also serve as chairman of the yearbook committee on nutrition.

PRELIMINARY surveys in Missouri indicate an increase in 4-H clubs from 1,910 in 1936 to 2,180 in 1937, with membership increased from 17,861 to 21,800 boys and girls. Home economics community clubs have also grown rapidly in the last year. There are now 1,800 home economics clubs with 33,600 members as compared to 1,665 clubs with 31,200 members last year.



New Georgia Director

APPROVED by the Board of Regents of the University System of Georgia recently was the appointment of Walter S. Brown as director of the Georgia Agricultural Extension Service.

No relation to his predecessor, Assistant Secretary of Agriculture Harry L. Brown, is the new extension director.

Walter Brown is a "real dirt farmer." Born and reared on a farm in Towns County, up in northeast Georgia on the North Carolina line, he spent the first 24 years of his life there. By farming, teaching school, and doing odd jobs, he saved enough money finally to continue his schooling at the University of Georgia College of Agriculture where he graduated in 1917.

The folks of Towns County immediately called Walter Brown back home to become their first county agent. After 2 years he was named district agent in charge of county agent work in the Atlanta district.

In 1921, extension officials, looking for a good district agent to develop work in the Savannah area, had not far to look. They settled on Walter Brown as the best man for the job.

He served as southeast Georgia district agent until he became acting extension director in January of this year. From a small group of 10 county agents in 1921 has grown the present set-up of 40 agents in that district.

For 2 years Walter Brown was in charge of the Government's tobacco-adjustment program in Georgia. He was transferred from Savannah to Tifton in 1932 to assist in supervision of the agricultural extension workers there. He was sent to Athens in 1934 at the time he assumed his duties with the tobacco program.

4-H club boys in Georgia have purchased 1,000 brood mares.

The World's a Stage

Interest in rural dramatics is being stimulated by one-act play tournaments. In South Dakota 80 new plays have been added to the loan library of the Extension Service, and the total collection of 400 plays offers a variety of material to the rural clubs competing in the contests held throughout the State.

In Massachusetts, true to their traditions of exclusiveness, clubs have been writing their own plays and have been competing in amateur play-writing contests. The plays are written, produced, and acted by home talent, and demonstrate what communities can do in the way of providing their own entertainment.

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News Value

Eighty percent of the newspapers in Nevada utilize news stories furnished by the State Extension News Service, according to Mrs. Mary Buol, assistant director for home economics. Mrs. Buol believes that a sense of news value in extension work is gradually being gained by local leaders of adult and 4-H club work and by community and county organization officers and committee members.

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Soil Conservation

Farmers in Puerto Rico are very much interested in learning about the 1937 agricultural-conservation program. According to reports from 26 extension agents holding soil-conservation meetings, the attendance at each meeting ranged from 40 to more than 200 farmers. The three motion pictures on soil conservation obtained from the United States Department of Agriculture seemed to be a real drawing card, as the attendance at meetings where the pictures were shown always passed the two hundred mark.

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Hawaiian Potatoes

Raising potatoes in 1936 was a profitable activity of 4-H club boys at Kunia, Hawaii. From an acre of land the boys harvested 120 sacks of potatoes which were shipped to California. "In addition to remuneration from their work, the boys have learned how to be cooperative and have acquired valuable knowledge concerning the fundamentals of potato pro-

duction," said Edwin Chun, assistant county agent of Honolulu County, who was in charge of this project.

Local business firms helped to finance the undertaking and furnished the land and equipment. After the boys cleared and plowed the ground they were shown how to perform the different planting operations such as opening furrows, fertilizing, and dropping the seeds. To prevent possible disease attack, they sprayed the plants with a Bordeaux mixture which Mr. Chun taught them how to prepare. To harvest the crop, the boys first plowed up the potatoes and then finished the digging process with hands and hoes. After being exposed to the sun for a while to harden the skin, the potatoes were packed in burlap bags for shipment.

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Taxation

Arkansas farm women are endeavoring to do something about their taxes. In 1937 a study course in government and taxation was developed for use by farm women in their home demonstration clubs. At the annual State home demonstration club camp delegates voted to continue this study in 1938.

AMONG OURSELVES

DR. W. BRUCE SILCOX has recently been appointed extension economist in dairy and poultry marketing with the Federal Extension Service. Dr. Silcox comes from Minnesota where he has served the Minnesota Extension Service in the same capacity. He has worked in Washington on two former occasions, first in 1933 as regional consultant for the purpose of preparing dairy marketing agreements for the Agricultural Adjustment Administration and later in 1935 as senior extension economist for the Farm Credit Administration.

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ON OCTOBER 1, Ruth Durrenberger, the 1936 Payne fellow from Florida, assumed the duties of home demonstration agent in Columbia County, with headquarters at Lake City, Fla. Columbia County has been without a home agent since 1929.

Family 4-H Outing

The two most southern counties in Nevada, Lincoln and Clark, have for the second consecutive year staged a successful 4-H family outing with 200 club members, leaders, and parents camping for 3 days high in the mountains, reports Florence S. Davis, district agent.

Each family or group chose its own camp site and did its own cooking. The day's program included hikes, games, and sports' demonstrations by the various clubs. The girls and women at camp thoroughly enjoyed a textile-identification contest, and the boys and men took part in a crop-judging program under the direction of the agents of Lincoln and Clark Counties.

Instruction in tree lore and plant identification by the Forest Service was a popular feature of the outing. The evenings were spent in entertainment with songs and stories.

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4-H Potatoes

Through the cooperation of the Business Men's Club at Walnut Ridge, Ark., the grocery stores of Lawrence County have agreed to handle all the potatoes grown by the 4-H clubs. The crop from the 1-acre demonstrations of club members was turned over to the merchants as soon as the potatoes could be harvested. They were advertised and sold as 4-H potatoes, reports County Agent John L. Faulkner.

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Chicken Testing

Maine farmers are assured of an ample supply of chicks from disease-free stock, and hatcherymen have had a very material increase in orders from all parts of the State, as well as from other States.

In recent years, the Maine Extension Service has carried on an intensive program of education among poultrymen to urge them to purchase chicks from stock that has been found free from pullo-rum disease. Persons selling baby chicks have been urged to test a sample of blood from each hen in their flock. When testing began in 1921, only 2,739 birds were tested, and 22 percent were found to be reactors. In 1937 more than 255,000 birds were tested, and only three-fourths of 1 percent were reactors. Heavy losses have been prevented by using stock from tested flocks.

CELEBRATION *of the* CONSTITUTION'S SESQUICENTENNIAL

THE celebration of the one hundred and fiftieth anniversary of the formation of the Constitution began September 17, 1937. It will continue from the anniversary of the signing through to April 30, 1939, including the anniversaries of ratification, the organization of the National Government, and the inauguration of President Washington.

The United States Constitution Sesquicentennial Commission cooperates in the observance of the celebration.

The Commission has the following available:

SETS OF FACSIMILES—Six sheets (24 by 29 inches): facsimiles of Constitution (4 sheets), Declaration of Independence (1 sheet), and pictures of Signers of the Constitution (1 sheet). Price per set \$1.50.

OFFICIAL POSTERS—Reproduction of official Christy painting in 9 colors and gold; figure of Liberty with Washington and other signers. "We the People": 15 by 22½ inches, 5 cents; 20 by 30 inches, 10 cents; 32 by 43 inches, 25 cents. "The Signing," 12 by 14½ inches, 5 cents; 24 by 27 inches, 10 cents; 42 by 38 inches, 25 cents.

THE PRESIDENT'S PROCLAMATION—Printed on special paper (17 by 23 inches); illuminated in colors with pictures of the Signers of the Constitution and vari-colored prints of the Seals of the 13 Original States, 10 cents.

THE STORY OF THE CONSTITUTION—Bound in fine leather embossed in gold, 50 cents; with cardboard cover at Commission headquarters or in stores, 10 cents. (Note: Orders to Commission, single copy by mail, 15 cents; orders of 10 or more, 10 cents.)

MUSIC Associated with the period of the formation of the Constitution and the Inauguration of George Washington. 25 cents.

FEDERAL MARCH (Alexander Reinagle)—Composed to celebrate Ratification by ten of the States, and first performed in the mammoth procession in Philadelphia, July 4, 1788. Copies free.

PAGEANTS—Our Constitution, historical pageant designed to demonstrate the scenes at Annapolis and at the Convention in Philadelphia; depicts the general unrest and conditions which prevailed in the Colonies before the Constitution was signed and ratified. 10 cents.

TREES—Symbolic pageant to be used by groups of children or young people at a tree planting ceremony in commemoration of the formation of the Constitution. Supplied without cost.



FROM MANY TO ONE—A processional pageant to be used as a part of a patriotic church service or community service. 10 cents.

TREE MARKER—Specially designed to mark the tree planted as a tribute to the Constitution. The inscription is printed with weatherproof ink on polished copper mounted on a thin slab of asphaltum so that the marker is virtually impervious to the elements. Each marker is equipped with two methods of fastening: (1) two standards to be planted in front of the tree; and (2) strap to be fastened to the trunk of the sapling. Without donor plate, \$1.00. With donor plate, \$1.50.

COLORED CUT-OUTS—Reproductions of the original painting of the "Signing of the Constitution," by Howard Chandler Christy, 22 by 14⅞ inches, 50 cents; 29 by 19¼ inches, 75 cents; 42¼ by 27¾ inches, \$1.00.

ADDRESS ALL ORDERS to the United States Constitution Sesquicentennial Commission, Washington, D. C. Make all checks or money orders payable to the Treasurer of the United States.